



CASE STUDY

TANZANIA Fuel Integrity Solution

Tanzania currently lacks domestic refining capacity, forcing it to import 100% of its hydrocarbon products via vessels from the sea. Dar es Salaam has one of the largest ports in East Africa, playing a crucial role also in the transit of fuel to neighboring countries, making Tanzania a vital link in the region's energy supply chain. This makes it the target of illicit trade practices, such as dumping of transit fuel without paying the due taxes and adulteration with kerosene and low-cost solvents.

Fuel Integrity Programs have been recognised as an effective tax administration measure and recommended by the International Monetary Fund for improving domestic revenue mobilisation, fighting illicit trade, combating cross-border smuggling and reducing tax evasion. (IMF, 2022 / IMF, 2021).

SICPA's Fuel Integrity Solution - which includes advanced forensic marking technology, an inspection system and an integrated monitoring platform - has been designed to be deployed country-wide to help governments eradicate fraud affecting the integrity of their hydrocarbon supply chain and recover lost tax revenues. Successfully implemented in different countries, including Tanzania, the solution is currently in operation or under implementation also in Gambia, Kenya, Niger, Sierra Leone, Uganda, the Philippines and Zanzibar.

SICPA's best-in-class solution for maintaining product integrity in the downstream fuel supply chain helps governments to:

- Reduce illicit trade and cross-border smuggling by increasing stakeholder compliance
- Increase excise revenue mobilisation and customs duty collection
- Ensure a level playing field for all economic operators by establishing a fair and healthy competitive environment
- Increase the quality compliance of fuel products to reduce pollution, preserve the environment and ensure engine performance

A unique technology ensuring product quality and fiscal compliance across the entire fuel supply chain

- Accurate quantitative detection of illicit trade on-site in 3 to 5 minutes
- Secure, centralised collection of court-admissible test results
- Analysis and business intelligence platform to monitor and enhance fraud prevention
- A solution from a company trusted by governments and international organisations



Enabling trust

The Fuel Integrity Program in Tanzania

Implemented in 2010 under the joint venture agreement with Global Fluid International – GFI Fuel, the fuel integrity program continues at present.

In 2021, the supervision of the fuel marking program was moved to the Tanzania Bureau of Standards (TBS) who exclusively marks fuel meant for local consumption with the exception of government reserves and specifically tax-exempted one. SICPA has since been running this program successfully for two years together with the TBS and the Energy and Water Utilities Regulatory Authority (EWURA), providing our latest solutions and offering our technical support services.

Forensic markers



- Highly secure forensic markers securing diesel, gasoline and kerosene.
- Marking is performed in 21 sites concentrated in the Dar Es Salaam, Tanga and Mtwara regions.
- Markers are highly resistant to any chemical washing and filtration processes.
- They are invisible, colourless, odourless, they have no effect on the fuel properties.
- Complying with all environmental regulations, they do not cause any damage to combustion engines and do not reduce their performance.
- Stable even under extreme climatic conditions, they have an extremely long shelf life.

Mobile forensic analysers



- 3 mobile forensic laboratories travel the country to quickly and in-situ determine the conformity of fuels at any point in the supply chain.
- Installed in 4x4 off-road inspection vehicles, they offer maximum mobility, reaching even the most remote corners of the country.
- SICPA's forensic analysers provide quantitative results measuring the degree of adulteration of the fuels tested, constituting a court admissible evidence that does not require any additional validation. These analytical properties are unique in the fuel integrity solutions' market.

End-to-end monitoring and reporting platform



- Monitoring of marking operations and field inspections provides the authority with unmatched visibility, both on fuel volumes intended for domestic consumption and their associated tax revenues, as well as on geographical distribution of non-conformities.
- Analysing alerts and detecting patterns of fraud allows for a more strategic and optimised use and planning of enforcement resources.
- This platform is a highly strategic tool to evaluate and monitor the impact of fuel marking programs.

SICPA Tanzania

SICPA provides advanced forensic marking technologies to help governments eradicate fuel fraud. Our dedicated engineers are always available for immediate support and maintenance services.

Key numbers

400

More than 400 trucks are marked per day.

80

80 skilled TBS local employees and fully trained by SICPA as fuel marking technicians are dispatched across the 21 marking sites

3.9 BN

3.9 BN litres of hydrocarbon products are marked per year.

Key achievements

Peril of Africa, 12 September 2021

26 filling stations in Tanzania resumed operations after suspension over fuel marking controversy

In 2021, the Energy and Water Utilities Regulatory Authority (EWURA) together with the Tanzanian Bureau of Standard (TBS) suspended 26 fuel stations suspected of tax fraud. Companies such as Total, GBP, Camel, Oilcom, Lake Oil and Oryx sold unmarked products and therefore received an estimated fine of TZS 182 million (USD, 77 000). SICPA's fuel Integrity solutions, through TBS/EWURA, enabled these 26 filling stations to resume operations.

AllAfrica, 25 May 2017

+USD 870 MN

Since 2010, fuel tax revenue has increased by more than USD 870 million.

"The government saved nearly USD 870 million last year as a result of tight fuel regulatory measures that include implementation of a chemical "mark" on imported petroleum products, a new report shows."

Learn more about
the solution



Market leader in security inks and leading provider of secured authentication, identification, traceability and supply chain solutions, SICPA is a long-trusted partner to governments, central banks, high security printers and the industry. Every day, governments, companies and millions of citizens rely on its expertise, which combines material-based covert features and digital technologies, to protect the integrity and value of their currency, personal identity, value documents, e-government services, as well as products and brands. True to its purpose of Enabling Trust through constant innovation, SICPA aims to further an Economy of Trust worldwide, where transactions, interactions and products across the physical and digital worlds are based on protected, unforgeable and verifiable data. Founded in Lausanne in 1927, headquartered in Switzerland and operating on five continents, SICPA employs about 3,000 people.